

### **REMARKS**

The Office Action mailed March 22, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-35 are now pending in the application. Claims 1-35 stand rejected. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **CLAIM OBJECTIONS**

Claim 5 has been amended, as set forth above, in accordance with the Examiner's suggestion to correct certain informalities. Therefore, Applicant respectfully requests that the objection to Claim 5 be withdrawn.

### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Vanderaar et al. (U.S. App. Pub. No. 2002/0018527) in view of Gilhousen (U.S. Pat. No. 5,751,761). This rejection is respectfully traversed.

As amended, Claim 1 recites, "A communication system for mobile platforms, comprising: a first mobile platform including a first transceiver that is assigned a first Internet Protocol (IP) address; a second mobile platform including a second transceiver that is assigned a second IP address; a ground station adapted to: transmit a forward link that contains an entire first IP packet modulated by a variable length orthogonal (VLO) spreader using a first VLO code such that said first transceiver is operated approximately at a saturation point of a first transceiver amplifier, and transmit said forward link containing an entire second IP packet modulated by the VLO spreader using a second VLO code such that said second transceiver is operated approximately at a saturation point of a second transceiver amplifier, wherein said first and second IP packet data have different information data rates; and a satellite that relays said forward link from said ground station to said first and second mobile platforms."

Neither Vanderaar et al. nor Gilhousen describe, show or suggest a communication system for a mobile platform that includes a ground station that transmits a forward link containing an entire first IP packet and an entire second IP

packet, wherein the first packet is modulated by a variable length orthogonal (VLO) spreader using a first VLO code and the second IP packet is modulated by the VLO spreader using a second VLO code. Additionally, neither Vanderaar et al. nor Gilhousen describe, show or suggest such a communication system wherein the first IP packet is modulated such that a first transceiver is operated approximately at a saturation point of a first transceiver amplifier, and the second IP packet is modulated such that the second transceiver is operated approximately at a saturation point of a second transceiver amplifier.

Rather, Vanderaar et al. describes a satellite-based architecture for dynamic assignment of links in a multi-user communication system. The architecture allows variable modulation and coding on a per-user basis through the use of time division multiplexing (TDM). Thus, Vanderaar transmits partial packets having a fixed number of bits in temporally divided time slots. Additionally, Gilhousen describes a system for allocating a set of orthogonal PN code sequences of variable length among user channels operative at different data rates in a spread spectrum communications system.

Thus, neither Vanderaar et al. nor Gilhousen describe, show or suggest transmitting a forward link containing entire first and second IP packets modulated using first and second VLO codes such that a first and second transceiver are operated approximately at saturation points of the transceivers' amplifiers.

Therefore, for at least the reasons set forth above, Applicant respectfully submits that amended Claim 1 is patentable over Vanderaar et al. in view of Gilhousen.

Claims 2-18 depend from amended Claim 1. When the recitation of Claims 2-18 are considered in combination with the recitations of amended Claim 1, Applicant submits that Claims 2-18 are likewise patentable over Vanderaar et al. in view of Gilhousen.

With respect to amended Claim 19, the limitation recited in amended Claim 19 are similar to the limitations recited in amended Claim 1. In accordance with the remarks set forth above with respect to amended Claim 1, Applicant respectfully submits that Claim 19 is also patentable over Vanderaar et al. in view of Gilhousen.

Claims 20-35 depend from amended Claim 19. When the recitation of Claims 20-35 are considered in combination with the recitations of amended Claim 19,

Applicant submits that Claims 19-35 are likewise patentable over Vanderaar et al. in view of Gilhousen.

For at least the reasons set forth above, Applicant respectfully requests that the §103 rejections of Claims 1-35 be withdrawn.

**CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7500.

Respectfully submitted,

Dated: <sup>ss</sup>  
5/24/04

HARNESS, DICKEY & PIERCE, P.L.C.  
5445 Corporate Drive, Suite 400  
Troy, MI 48098-2683  
(248) 641-1600

By: 

Scott T. Gray, Reg. No. 48,891